



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

H. A

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,998	11/03/2003	Victor H. Garmong	020028CIP	5383
26285 7590 07/13/2007 KIRKPATRICK & LOCKHART PRESTON GATES ELLIS LLP 535 SMITHFIELD STREET PITTSBURGH, PA 15222			EXAMINER NGO, HUNG V	
			ART UNIT 2831	PAPER NUMBER
			MAIL DATE 07/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/699,998	<b>Applicant(s)</b> GARMONG, VICTOR H.	
	<b>Examiner</b> Hung V. Ngo	<b>Art Unit</b> 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 145-214 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 145-162 and 181-198 is/are allowed.
- 6) ☒ Claim(s) 163-166, 170-180, 199 and 200 is/are rejected.
- 7) ☒ Claim(s) 167-169, 201-214 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 173 is objected to because of the following informalities:

“third hinge block” and “fourth hinge block” is unclear because there are no first and second hinge blocks. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 163-166, 172 are rejected under 35 U.S.C. 102(b) as being anticipated by Massey et al (US 5,966,104).

Re claim 163, Massey disclose an articulated mast, comprising: a base member (70); a first rigid mast segment (54) pivotally coupled to said base member and being selectively movable between a position wherein said first mast segment is coaxially aligned with a portion of said base member and other positions wherein said first mast segment is not coaxially aligned with said base member (Fig 5a, Fig 5b); and a second rigid mast segment (56) pivotally interconnected to said first rigid mast segment wherein said first and second rigid mast segments are

selectively pivotable relative to each other between positions wherein said first and second rigid mast segments are coaxially aligned with each other and other positions wherein said first and second rigid mast segments are not coaxially aligned relative to each other (Fig 5b).

Re claim 164, further comprising means (mechanism) (abstract) for pivoting said first mast segment between said position wherein said first mast segment is coaxially aligned with said portion of said base member and other positions wherein said first mast segment is not coaxially aligned with said base member.

Re claim 165, wherein said means for pivoting comprises a device selected from the group of devices consisting of a hydraulic cylinder, a pneumatic cylinder, and a stepper motor (col. 3, line 30).

Re claim 166, wherein said first mast segment is pivotally coupled to said base member by a first joint assembly comprising: a first hinge block coupled to an end of said base member; and

a second hinge block pivotally hinged to said first hinge block and coupled to an end of said first mast segment (Fig 5b).

re claim 172, a second mast segment is pivotally coupled to an end of the first mast segment (Fig 5b).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 170, 171, 173-180, 199, 200 are rejected under 35 U.S.C. 103(a) as being unpatentable over Massey et al (US 5,966,104).

Re claim 180, an antenna (12)

Re claim 200, see Fig 5b.

The teaching of Massey et al as discussed above does not disclose the first and second hinge blocks made of metal (re claims 170, 171), a third mass segment, fourth, fifth sixth hinge blocks (re claims 173-179, 199).

Re claims 170, 171, It would have been obvious to one having ordinary skill in the art at the time the invention was made to use metal for the hinge blocks of Massey et al for intended purpose, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Re claims 173-179, 199, It would have been obvious to one having ordinary skill in the art at the time the invention was made include the additional mass segments and hinge blocks with the antenna assembly of Massey et al, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

***Allowable Subject Matter***

Claims 145-162, 181-198 are allowed.

Claims 167-169, 201-214 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung V. Ngo whose telephone number is (571) 272-1979. The examiner can normally be reached on Monday to Thursday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on (571) 272-2800 EXT 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/699,998  
Art Unit: 2831

Page 6

HVN  
07-09-07

Hung V Ngo

**HUNG V. NGO**  
**PRIMARY EXAMINER**